normal. The difference in the length of breast- feeding between the city and the rural women is not considered to be very high. The shorter length of breast-feeding in the city might be due to the effects of urbanization (it is noticed that most of the population in the camp is from urban areas especially Kabul). A statistical analysis showed no significant relation between maternal education and length of breast-feeding.

4.5.2 Weaning

The average age to start supplementary food for children was 8 months. Most mothers stopped breast feeding due to another pregnancy and some felt that they didn't have enough breast milk. The most common first weaning food given to young children was bread with tea, followed by biscuits (mainly BP5) mixed with tea, milk or water. Children are given other foods from the family pot: vegetable soup, rice and fruits being the most common ones in the early stages. Most of the time the children were fed by hand, where by the cleanliness of the hand is questionable, especially in the rural areas.

At all the locations, it is observed that people believe BP5 as the best food on earth for children and disregard the other food they have at home. Many people are buying BP5s at expensive prices. It is also worrying to see that children like the BP5 too much and care less for the local foods. This is considered to have a negative impact as it is changing the traditional food habits and the availability of BP5 is not sustainable.

BP5 is also very popular among the other family members. The high market price of BP5s can jeopardize the appropriate use of it during future emergencies in that a feeding programme, using such biscuits, is prone to cheating, corruption, and in extreme cases, purposive starvation of children so that they can be included in such programmes (most of these were experienced by MSF when running a dry supplementary feeing programme in New Hadda camp which included considerable amount of BP5s as part of the ration). These special biscuits are particularly meant for initiation of wet supplementary feeding programmes in situations where other commodities are not immediately available and cooking is difficult.

4.6 Vaccination coverage

Most of the sampled children (about 70% in the camps and Jalalabad and 80% in Shenwar district), didn't have a vaccination card. Therefore, the result of the EPI coverage only from the raw survey data is inconclusive. Extrapolated results from the group of children with cards for each location showed inadequate coverage. The BCG coverage was evident by the presence of a scar.

Table 5: Proven (=minimum) and extrapolated (=maximum) vaccination coverage per location

Location	BCG	*Fully vaccinated		Measles		Never been vaccinated	
	(presence of scar)	Minimum	Maximum	Minimum	Maximum	Minimum	Maximum
New Hadda	68.1%	12.2%	36.7%	23.6%	71.1%	11.2%	31.9%
Sarshahi	53.6%	7.7%	24.2%	25.9%	80.7%	5.3%	46.4%
Jalalabad	64.2%	10.6%	49.0%	13.8%	63.8%	13.8%	35.8%
Shenwar	58.5%	15.3%	34.6%	25.1%	56.4%	31.5%	41.5%

*Fully vaccinated= BCG, Measles, and DPT/Polio three times)

Considering the aim of 80 - 90% coverage, the coverage of full vaccination is considered to be unsatisfactory at all the locations. This is especially considered to be low for a coverage of a closed camp situation where vaccination services are easily available and have been so far over 12 months.

The full coverage is observed to be higher in Jalalabad and Shenwar than the in camps. A possible explanation could be that, the local population only goes for vaccinations when they are completely convinced of the advantages of vaccination and want to get their children fully vaccinated. While in the camps lots of health services are available, people are used to vaccination campaigns and they might not have well understood/been convinced about the different vaccinations and the importance of getting their children fully vaccinated. How ever it is proposed to investigate this further in the next survey.

The estimated 80.7% measles vaccination coverage in Sarshahi is considered to be satisfactory. The 71.1% measles coverage in Hadda is encouraging but could have been better. This difference might be due to the reasons that: there might have been a better organized measles vaccination campaigns in Sarshahi camp than new Hadda, vaccination campaigns in Sarshahi were repeated, Sarshahi is an older camp than New Hadda and the coverage difference could also be caused by the difference in length of time involved, the MSF home visitors programme in New Hadda was not functioning well (It is the responsibility of the home visitors to do health educations, active screening and referral of children for vaccination).

4.7 Diarrhoea

Diarrhoea, defined as "loose stool for more than three times a day in the last 48 hours", was observed in 20.0% and 31.3% of the sampled children in Jalalabad and Shenwar respectively. This was not directly assessed by the survey in the camps, but according to the camp medical records diarrhoea was treated in 20.4% and 11.4% (of the < 5 children) respectively in New Hadda and Sarshahi camps in December 1995.

The observed incidence of diarrhoea at all the locations is considered to be very high (district being worse), especially given that this is not a peak season for diarrhoea. This was discussed among the MSF medical team and it was felt that the minimum threshold chosen to define diarrhoea (loose stools 3 times a days) probably is too low. It might have included some normal stools as well. However, with a tighter definition the incidence is still believed to be high and a cause for concern.

The reason behind the reported high incidence of diarrhoea is most likely to be the very poor environmental sanitation, lack of knowledge of hygiene and cleanliness especially in Jalalabad and the district. The camps are observed to have a better water and sanitation system than the city and the district. The reason behind the difference in incidence of diarrhoea between New Hadda and Sarshahi can not be explained from the information obtained by this survey as water-sanitation and hygiene situation are similar for both the camps.

It was felt that the incidence of diarrhoea, as reported by the clinics, might have been overestimated in New Hadda as the total attendance of patients in the month is found much higher than what would have been expected for a population size of the camp and the period of emergency (see below, health services utilization).

At both Jalalabad and the district there was no statistically significant relation observed between diarrhoea and acute malnutrition. This may be due to the reason that the diarrhea as defined by this survey might have included some normal stools as well.

4.8 Health-seeking behaviour and health services utilization

This was mainly assessed in New Hadda and Sarshahi as MSF is actively involved in the health care services of the camps.

The very first response if somebody in the household becomes ill was to give tablets which they have in the house already, without consulting a medical person. In many of the households, it was very common to see a bag of tablets/syrup hung high up on the walls of their tents. They believe that injection or syrup is the best treatment, and coloured capsules are regarded as good medicine, better than white tablets.

The average time people consider they should see any effect after a treatment was 2 days. If the patient doesn't get better in this time they go to a Jalalabad private clinic seeking a better medicine (especially injections, syrups or capsules). If a patient gets better in the middle of taking a course of treatment, he/she stops taking the treatment. The leftover tablets can be kept for future use by the same person or by others.

In general people regarded the services given at the clinics in the camp as low quality because the clinics don't often provide injections or syrups; dispense low quality tablets as they are all white tablets; and favouritism (if you know people working in the clinics you get a better treatment).

Nevertheless many people are reported to attend the clinics in the camps; in the month of December alone a total of 21,062 patients were reported to have visited the MSF clinics in New Hadda and 39,340 patients were reported to have visited the clinics in Sarshahi (Healthnet, IIRO and UA clinics) in November. This makes a consultation rate of 8 consultations/person/year and 5.9 consultations/person per year for New Hadda and Sarshahi camps respectively. This is found to be much higher than the world average of 2 - 3 consultations. This didn't include the consultations at privet clinics, so the consultation rate could be even higher.

The number of attendances at the clinics is considered to be extremely high for a protracted emergency period like the one in the camps. Some of the possible contributing factors for this could be, People from outside the camp visiting the clinics and very poor patient registration and follow-up at the clinics.

The same health seeking behaviour is observed in Jalalabad concerning the first response to illnesses, and to what is considered to be a good treatment. But since the health services are expensive (mostly private clinics) it is not likely that people visit a doctor for every minor complaint.

In Shenwar the first response when someone gets ill is to start treating with herbs at home. All the families interviewed reported that they would start treating patients at home with herbs. If the herbs do not help, they would go to a private doctor in their own village first, and if there is no effect they would go to the central hospital in Ghanie Khel, then Jalalabad or Peshawar. Injections, coloured tablets and capsules were considered to be the best treatment.

There are different types of herbs given for different kinds of complaints, **Examples mentioned are:** "Badyan" and "Sperkey" for stomach problems, opium

("Koknar") for almost all complaints, especially for any type of cough, cold and difficulty in breathing. According to the interviews about 55.3% of the sampled families gave Koknar to ill family members in the two weeks prior to the survey. The dosage given for different age and illnesses is not clearly known. But it is thought to be quite small.

4.9 Parental education

Parental education was assessed in Jalalabad and Shenwar district. There was no direct comparison made between parental education and other variables assessed. The main purpose was to have some appreciation of the issue which can be further investigated and analyzed in the future surveys. It is expected that the camp population have a similar educational situation as of Jalalabad city.

Of the total interviewed in Jalalabad (N= 46), 21.7% of the women were said to be having some kind of education (at least write their own name), while this was only 2.1% of the interviewed women in the district (N =47). Educated husbands were reported to be 63.6% in Jalalabad and 33.3% in the districts.

5.0 CONCLUSIONS

The nutritional status at all locations is considered to be satisfactory.

The malnutrition rate is observed to be slightly higher among IDPs than among the local people and is expected to deteriorate owing to the precarious household food security observed. The nutritional status of the local population is not expected to deteriorate, because of their better food security situation.

The ways the IDPs are coping at present is found to be very vulnerable and risky, this is observed to be worse in New Hadda camp. Their asset base has been depleting over the long period of displacement and other means of income are limited. A total depletion of assets can have serious consequences in that it weakens the abilities of the IDP to challenge emergencies in the future and their ability to recover from emergencies. On the other hand, the local population (city and rural) don't seem to have depleted their assets and were observed to have good food stocks. As a result they are expected to have a better ability to withstand emergencies.

Although not very serious, the present beliefs and practices on infant/child feeding and hygiene were identified as underlying causes of under five malnutrition. While the length of breast-feeding is good, exclusive breast-feeding is rare, colostrum is not given to most of the children, the introduction of supplementary feeding was started very late in some cases, and sometimes abrupt following another pregnancy.

The reported incidence of diarrhoea is high at all the locations, especially given that this is not a peak season for diarrhoea. However, there is no statistical relation observed between diarrhoea and acute malnutrition. In view of the poor hygiene and sanitation and repeated attacks of diarrhoea, it is likely that it contributes to permanent growth deficit in children (chronic malnutrition).

The result of the EPI coverage only from the raw survey data is inconclusive as most of the children didn't have cards. Extrapolated results showed inadequate full coverage at all locations. Especially for a closed camp situation of New Hadda and Sarshahi, with health services easily accessible, the observed full vaccination coverage is considered to be very low, except for measles vaccination coverage in Sarshahi (80%) which is considered to be satisfactory.

The utilization of the existing health services in the camps as reported by the respondents is poor, though records from the clinics in the camps showed a higher consultation rate of patients than what would have been expected for the size of population at both New Hadda and Sarshahi camps. Consultation rates were observed to be higher in New Hadda than in Sarshahi. Lack of understanding and inappropriate use of medicines and over consumption of western drugs is observed at all locations.

A high usage of opium in the rural districts as treatment for almost any kind of illnesses, with dosages not clearly known, doesn't seem to be appropriate and is considered to be a potential public health problem.

7.0 RECOMMENDATION

MSF recommends to WFP that at least the present ration is maintained in the camps, especially in New Hadda, in order to avoid deterioration in the nutritional status of the population.

MSF recommends that in depth assessments (by concerned organizations) on who are living in the camps, and how they are coping, should accompany decisions concerning any assistance given to the IDP, especially of the general food ration.

MSF recommends that concerned organizations should focus on saving the limited assets of the IDPs and provide other opportunities of earning income/food. This would improve the future of the next generation by allowing children to go to school.

Exclusive breast-feeding, and giving colostrum to children should be promoted.

Organizations involved in donating and distributing BP5 biscuits should revise their policies towards the appropriateness of the present use of BP5 biscuits.

Organizations involved in the health sector should be aware and pay attention to the health-seeking behaviour of the people in all the 4 locations: look into what they consider is the best treatment and the reasons behind this. Considerable attention should be paid to the misuse of medical drugs and overuse of medical services during health education and training. The reason behind the high attendance rate of patients at the clinics in the camps, should be investigated.

Agencies involved in the EPI programme should try to improve the coverage. The reasons behind the low coverage rates in the camps should be investigated.

The reason behind the high percentage of diarrhoea should be investigated more and appropriate measures should be taken by the concerned organizations at all the four locations. This should include revising water and sanitation provision. The appropriateness of the minimum threshold level used to define diarrhoea (3 or more episodes a day) by this survey should be looked into for future surveys.

The observed high use of opium as a treatment of any disease doesn't seem to be appropriate. This should be investigated more by concerned agencies.

It is recommended to repeat the survey at all the four locations after 6 months in order to update information and make comparison of the status in a different season.

NUTRITIONAL SURVEY, DATA COLLECTION FORM

CLUSTER NO:___________ DATE OF THE SURVEY:_______________,
TIME:_____________ TEAM NO:___________ AREA:_______________

NO	SEX	AGE	HEIGHT IN CM AND MM	WEIGHT IN KG AND G	OEDEMA 1=YES 2=NO	DIARRHOEA 1=YES 2=NO
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						

* DIARRHOEA= HAS THE CHILD HAD DIARRHOEA IN THE LAST 2 DAYS (LOSE STOOL THERE OR MORE TIMES A DAY)

VACCINATION SURVEY, DATA COLLECTION FORM

CLUSTER NO:____________
DATE OF THE SURVEY:_________________, TIME:_____________
TEAM NO:____________
AREA:________________

NO	SEX	AGE	CARD 1=Y 2=N	BCG 1=Y(SCAR) 2=N	POLIO 1=1* 2=2* 3=3* 4=UNKNOWN 5=NEVER	DPT 1=1* 2=2* 3=3* 4=UNKNOWN 5=NEVER	MEASLS 1=Y 2=N 3=UNKNOWN
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
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15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							

FOOD (QUESTIONER PER HOUSEHOLD)

2. Where do you get your food from?

0 Ration from WFP
0 Gifts from families and rrelatives
0 Buy from the market
0 Other

3. What proportion of the food your family eats you get from GRD?
0 Less than half
0 about half
0 more than half
0 most
0 all

4. What proportion of the food your family eats do you buy from the markets?

0 less than half
0 about half
0 more than half
0 most
0 all

5. How much food (cerials) do you consume per month to feed yuor family?
Rice (kg) ____________________ Wheat (kg) __________________________

6. What foods did your family eat yesterday?

0 meat
0 Tomatoes
0 Carrots
0 Leek
0 Eggplant
0 Barley
0 Fruit ____________________
0 Rice
0 Turnip
0 Radish
0 Garlic
0 Squash
0 Maize
0 Nan
0 Potatoes
0 Spinach
0 Pumpkin
0 Wheat
0 Beans/peas
0 Others ____________________________

7. How many times your family eat yesterday?
0 Once
0 Twice
0 Three times
0 Four times

8. What source of income does your family have (FFW or CFW)? (Estemate the amount of cash or food per week)

0 selling ration ________________ 0 Selling labour _______________
0 Crafts ________________ 0 Selling of fire wood _______________
0 Relative working elsewhere who sends money ____________________
0 Other _______________________________

9. How much do you spend on the following items per week/month?
Food ______________________ Fuel ______________________
Transport ____________________ Medicines ____________________
Education ____________________ Others ______________________

INFANT/CHILD FEEDING PRACTICES

1. Is your youngest child a boy or girl? 0 Boy 0 Girl

2. What is the name of the youngest child? ____________________

3a. Are you breast feeding the child now? 0 Yes 0 No
IF NO, GO TO QUESTION 6, IF YES CONTINUE WITH QUESTION 4

b. Did you give colosrom to your child? 0 Yes 0 No
If No why? ____________________

4. Do you give the child supplementary food as well as breast milk? 0 Yes 0 No
IF NO, GO TO QUESTION 7, IF YES CONTINUE QUESTION 5a

5a. At what age did you start giving the child food other than breast milk? ______________ months.

b. What was your first supplementary food you gave the child and how was it given?

____

c. What other foods do you think are good for children at the early stage of life?

____

6. If you are not breast feeding the child at what age did you stop and why? ___________

HYGIENE

1a. Where do you get your water for drinking from?

0 Wells   0 River
0 (look in to other sources for Jal. and districts)

b. How do you store your water for drinking?
0 Covered containers   0 Other containers

2a. When do you usually use soap to wash your hands?

0 Before eating   0 Before cooking
0 Before praying   0 After defecating

b. Do you have soap in the house now? 0 yes
0 No

3a. How dose your family dispose of household rubbish?

0 Rubbish heap in the compound
0 Rubbish heap outside the living compound
0 Pit in the compound
0 Pit outside the compound
0 Other ____________________

b. Do you burn your rubbish? 0 Yes   0 No

4. Where do people in your household defecate?
____

5. What do you do when someone in your family is sick?

0 Nothing   0 Go to mullah
0 Go to doctor/clinic   0 Go to health worker
0 Go to hakim   0 Give herbs
0 Other ____

1.0 INTRODUCTION

Nutrition and vaccination surveys were conducted in the New Hadda camp of displaced people (6/12 - 12/12/95), Sarshahi camp of displaced people (16/12 - 22/12/95), Jalalabad city (6/1 - 17/1/96) and Shenwar Woloswali (24/1 - 1/2/96) in Nangarhar province. Separate reports have been written on the surveys in each of the above mentioned locations. The purpose of this report is to try to compare and discuss the results of all the four locations.

In addition to the anthropometric and vaccination coverage, it was also decided to assess other nutrition/health related issues such as food security, incidence of diarrhoea, infant/child feeding practices and hygiene.

The surveys in the camps are conducted as part of the MSF ongoing monitoring of its emergency projects.

The surveys among the local population (city and rural districts) were initiated following the decision made by the World Food Programme (WFP) to stop the food rations in the camps saying that the nutritional situation of the population in the camps is better than that of the local population. However MSF disagreed with this decision because it felt it was not supported by reliable information; there was very little data available on the nutritional status of the local population. MSF feels that decisions like this should be based on reliable information and data.

MSF proposed to conduct surveys among the local population in January 1996, since it had the capacity/expertise (a nutritionist and trained team) available at this time.

In addition to the usefulness of the information for its own activities and other relevant agencies, MSF feels that the information obtained from this survey can especially be of use for Healthnet International (a development organization linked to MSF) as base line information for their newly started medical rehabilitation/development programme in the region, starting in Shenwar district.

Reports on individual surveys and more information can be available on request to MSF office in Peshawar.

2.0 BACKGROUND

Since early 1980s, Nangarhar province has been suffering from severe fighting among the different warring factions. In 1992 most parts of the province were handed over to a "Shura" (council) of different groups. Following the handing over, the security situation of the province, its districts and city improved considerably. However, the security situation is still uncertain and very vulnerable due to the absence of centralized government power. The Province is still ruled by a collective "shura" of different political groups headed by a Governor. The current governor has been in place for 3 years and also rules over all 3 provinces of the Eastern Region.

Due to the relatively quiet security situation in the province since 1992, many people who were displaced because of the fighting in the other parts of the country (mainly Kabul and its surroundings), fled to Nangarhar province and are now settled in five camps (New Hadda, Sarshahi, Semar Heale, Old Hadda and Bagghai Momtaz) near the provincial centre of Jalalabad city.

The population of Jalalabad city is estimated to be over 200,000. Due to its strategic location (its borders with Pakistan) Jalalabad is known to be one of the five most important provincial centres of the country (Jalalabad, Kabul, Mazar-i-Sharif, Herat and Kandahar). The main occupation of the city population is trade (petty trading and big scale trading), employment with agencies (government and non government) and individuals and daily labouring work. The food supply to the city comes from the rural villages of the province.

Shenwar Loye Woloswalie (Shenwar big district) used to be the name of one big district in Nangarhar province. Due to recently made changes in administrative regions, the "big Shenwar" is divided into six independent districts. The district is chosen for this survey since it is easily accessible and is the project area of Healthnet International. For the purpose of this survey we refer to the whole area as "Shenwar district", the old name.

The population of Shenwar is estimated to be over 150,000. The main occupation of the district population is agriculture. The main production being cereals, vegetables and opium (as a cash crop).

Sarshahi camp was formed in January 1994, and New Hadda camp was formed in October 1994. The population of Sarshahi camp is estimated at 80,000 and the population of New Hadda at present is estimated at 30,000 (population estimates are based on number of tents multiplied by average family size of 7 which is used for general ration distribution).

The IDPs in both New Hadda and Sarshahi camp depend on international aid (for their food, shelter and health services) and they obtain some income by selling their labour, their assets and by borrowing. Sarshahi camp is observed to have better income earning opportunities since: it is older; security is reasonably good so people can easily move around to work or collect fire wood; it is located by the main business road and has a bigger market. In New Hadda security is a big concern and it is located far from the main road.

The health care service for the population of the province is the responsibility of MOPH (Ministry of Public Health). The capacity of the MOPH is very low; at present MOPH greatly depends on the assistance of international agencies. MSF has been actively involved in providing emergency health care services to the IDPs in New Hadda camp and Sarshahi camp. Since the emergency health problems came under control over the last year, MSF activities in Sarshahi were handed over to Healthnet international as of December 1995. The MSF activities in New Hadda are continuing since there are still needs.

3.0 METHODOLOGY

3.1 Calculation of the sample size

A two stage cluster sampling method was applied for all the four locations. The age group included in the anthropometric and vaccination survey is 6 months - 5 years. The internationally accepted cutoffs of 65cm - 110cm, were used to determine the age of children between 6 months and 5 years.

The sample size was calculated using the following formula:

$$n = z^2 \times \frac{p \times q}{d^2}$$

n = sample size
z = parameter related to the error risk, equals 1.96 for an error risk of 5%
p = expected prevalence of malnutrition in the population expressed as a fraction of 1
q = 1 - p, expected proportion of children not presenting malnutrition expressed as a fraction of 1
d = absolute precision expressed as a fraction of 1.

For each child in the nutrition survey sample, the vaccination status (DPT, measles, polio) was checked on the vaccination card. Whether the child received BCG was determined by the presence of the BCG scar. The registrar noted down what vaccinations the child received: BCG and measles; yes or no and DPT/Polio; none, once, twice, or three times. In cases where no vaccination card could be presented the measles, DPT and polio vaccination status was noted as 'unknown', unless the accompanying adult declared that the child had never been vaccinated.

Other information was gathered through key informants and general observation which was cross checked by interviewing randomly selected households at different locations.

3.2 Team organization

The data was collected by two teams of 5 people. In each location the anthropometric and vaccination data were collected within 5 -7 days. A team consisted of two height measurers, one for weighing, one to assist in the whole process and one registrar (supervisor). A translator was needed in one of the teams (for the expatriate supervisor).

It was decided to limit the number of teams only to two as it is thought to be easier to standardize equipment and methods, to supervise and to crosscheck the information collected.

The interviews were done by 1 female expatriate with a female Afghan translator. An interview took on average 45 minutes per household. In order to avoid crowds of people which can reduce the quality of information collected, no car was waiting outside while doing the interviews.

Mobilization of the whole camp or the local areas during the time of data collection was not felt to be necessary, since women and their young children are always to be found around their home area easily. Rather it was felt that active mobilization can bias the information, especially in the camps. It has been experienced by MSF that there is an interest in keeping the malnutrition rates found in surveys high. If people know before hand which blocks are going to be assessed, at what date and time, they may try to influence the data. Malnourished children can, for example, be moved from block to block and weighed and measured several times.

3.3 Equipment used

Data collection forms were designed based on which information was required. A 25 kg hanging salter scale graduated by 0.1 kg was used to weigh the children. Height measurements were taken with self constructed measuring boards (in New Hadda and Sarshahi camps) and the newly invented foldable measuring boards, made of anodized aluminium (brand "promes"), were used in Jalalabad and Shenwar. Height measurements were read to 0.1 cm. Children under 85 cm of length were measured lying down and children 85 - 110 cm were measured standing up.

There was no difference observed in the accuracy of height measurements by the self constructed wooden measuring boards and the foldable aluminium ones. But the foldable measuring boards were found to be much easier to carry, easier to read, hygienic, weatherproof and durable.

Data was processed and analyzed by utilizing EPI INFO software package.

4.0 DISCUSSION OF THE RESULTS

4.1 Variables assessed

The nutritional survey at all locations assessed anthropometric indices which indicate acute nutritional problems (W/H). The result is presented in terms of Z scores (standard deviation from the median W/H). In all locations, infant/child feeding practices, some aspects of health seeking behaviour and EPI (Extended Programme of Immunization) coverage were assessed.

In New Hadda and Sarshahi camp, factors affecting food security were assessed. In addition, coverage of the MSF Dry Supplementary Feeding Programme (DSF) was assessed in New Hadda camp.

Food security factors were not directly assessed by this survey in the city and the district since it was felt to be too sensitive (especially given the little involvement MSF has at these locations), but it was possible to make some indirect observations and comparisons.

4.2 Sample size and composition

It has been observed that in all the four locations both sexes were represented in naturally acceptable proportions. The difference in the male/female ratio for the different locations is considered to be not significant. This suggests that the sampling method was consistent and reliable.

Table 1: Sample size and sex composition

Location	Boys	Girls	Total
New Hadda	249 (47.2%)	278 (52.8%)	527
Sarshahi	261 (52.9%)	232 (47.1%)	493
Jalalabad	455 (50.1%)	453 (49.9%)	908
Shenwar	499 (50.4%)	441 (49.6%)	890

The sample size was determined by the expected malnutrition rate and the precision required for each location. The expected prevalence rate for New Hadda and Sarshahi camp was 20% and 25% for Jalalabad and Shenwar. The precision desired was 5% for the camps and 4% for Jalalabad and Shenwar.

Greater precision was desired in Jalalabad and Shenwar since little previous data exists on the nutritional/health situation of these locations and MSF didn't have enough experience in these locations to have a good impression of the situation. **The prevalence of malnutrition rate was also expected to be higher among the local** population (the argument of WFP).

All the locations had a lower malnutrition rate than the expected prevalence used to calculate the sample size. Therefore, the sample size taken at each location is observed to be much more than what would have been sufficient for the observed malnutrition rate. A slightly lower sample size in Sarshahi and Shenwar than originally planned is due to the fact that some of the parents of selected children were not willing for their children to be included in the survey sample.

4.3 Nutritional status

In all the four locations the malnutrition rate observed was satisfactory at the time of the survey. Though not significant, a higher malnutrition rate is observed in the camps than among the local population (Jalalabad city and Shenwar district).

As the household food availability and consumption, at the time of the survey, was observed to be acceptable in the camps, the higher malnutrition rate is not likely to be attributed to acute food shortage. However, it might be attributed to lack of appropriate care to children as a result of the disturbed life situation and generally lowered standard of living of the IDP. The table below shows the global and severe malnutrition rate per location.

Table 2: global severe malnutrition

Location	Global Acute	Confidence Interval	Severe Acute Malnutrition	Confidence Interval
New Hadda	4.0%	0.6% - 7.4%	0.6%	0.1% - 2.0%
Sarshahi	4.7%	2.5% - 8.4%	1.6%	0.6% - 4.7%
Jalalabad	3.2%	1.8% - 5.4%	0.7%	0.1% - 2.1%
Shenwar	2.6%	1.4% - 4.7%	0.9%	0.3% - 2.5%

The observed food situation in the camps is considered to be vulnerable and deterioration of the nutrition status is anticipated, especially in New Hadda camp.

Despite the better food security observed in Sarshahi camp, the global malnutrition rate is slightly higher than New Hadda, this can partly be explained by the impact of the MSF Dry Supplementary Feeding (DSF) programme running in New Hadda camp (with a coverage rate of almost 100% of its target group). Otherwise a similar or even worse situation could have been observed in New Hadda. The proportion of the severe malnutrition rate in Sarshahi is considered to be high. The existence of the curative DSF programme in Hadda must have prevented the development of severe malnutrition.

4.4 Food Security

The food situation of the camp populations, especially of New Hadda, appears to be vulnerable.

4.4.1 Food availability

People in the camps ranked their food sources as market purchase and food aid (general food ration) in order of importance.

The IDPs in the camps have received general ration distribution on an average time period of 45 days in the last 3 months. According to the information provided by the MSF food basket monitors in the last 3 months, the amount distributed is 1 bag of wheat (45 - 50kg) per family. This amount is estimated to be about 45 - 50% of the staple needs and provides 500 kcals/per/day (25% of the minimum calorie requirement of 2100 Kcal/person). Up until 6 months ago the ration distributed in the camp, used to be double this amount and also contained other non staple items.

The food availability at market level is observed to be good at all the locations. Food prices are said to be cheaper in Jalalabad and in the district central markets than the bazaars at Sarshahi or New Hadda. However, due to the fact that people in the camps depend on daily purchases and there is a high transportation cost, they mainly used the bazaars in the camps.

The availability of food at household level seemed also satisfactory at all the locations at the time of the survey. For the local population (city and rural) this time is considered to be a time of food scarcity as it is a planting season, but a very good buffer stock of food is observed especially in the rural areas and hence, seasonality of food availability is not likely to affect nutritional status.

Unlike the local population the camp population was observed to have a smaller stock. It is also noticed that the survey was conducted immediately after general food distribution, and this availability of food might not be sustainable. In general the household food security of the population in the camps still remains to be precarious, especially in New Hadda camp (see cash/food income below).

4.4.2 Cash/food income for the camp population

Selling assets, borrowing money and goods and selling labour (including sending very young children out to work for a very cheap price in unhealthy circumstances), were observed to be the main sources of cash income for the camp population. Although this was not directly assessed in the city and district, the impression is that selling assets or borrowing is not practised at the moment.

New Hadda camp is observed to have less favourable sources of income than Sarshahi.

Table 3: Source of income in New Hadda and Sarshahi camp

Source of income	New Hadda	Sarshahi
Selling of their own labour	78.0%	68.0%
Selling assets/property	17.0%	15.0%
Petty trading	6.0%	35.0%
Borrowing and assistance from family/friends	52.0%	25.0%
Employment by agencies (skilled/unskilled)	11.0%	17.5%

Selling of their own labour:

IDPs from New Hadda camp went to work as labourers in Jalalabad city, mostly on construction work. In case of Sarshahi, 85.0% were working in Jalalabad and the other 15% were working in Peshawar (mostly in brick factories).

Due to a high degree of competition in finding daily work in Jalalabad, people work on average 5 days a week with payment made in cash, which is on average equivalent to 20,000 AFs per week. A better payment was observed in Peshawar which averaged 50,000 AFs/week.

People were not very willing/comfortable to answer on this question. The general observation is that in most cases there was more than one person participating in labour selling per family. Young boys are involved in selling labour for an even cheaper price than adults.

There is an increasing competition on the labour selling market and this source of income is not guaranteed on a permanent basis. The security situation in New Hadda is not reliable so male members of families in the camp feel that they can not go to work elsewhere, eg Peshawar, and leave their family alone in the camp. On the other hand the security situation in Sarshahi seems to be stable and people can move to other places to work. The camp is older, well established, located by the main business road, has a bigger market and there are more opportunities for employment in the camp itself (like petty trading and employment by agencies).

Percentage of selling labour in New Hadda is higher, that might be due to the reason that other sources of income are less and the price of labour in Jalalabad is low and therefore, as many family members as possible need to be involved in the selling of labour in order to meet their expenses; this is expected to include many young children.

Selling assets and assistance from friends and family:

People reported that they are selling assets like carpets, jewellery, bicycles, cars etc. They have already sold most of their property which they brought to the camp. Since the relief assistance given to them (especially food) was adequate at the early stage of the their displacement, they could manage to save some property (or at least the money from the selling of property). However, since the reduction of ration (in the last 6 months) people are more dependent on this source of income and saving is less possible. It seems that their assets are depleting very rapidly. However, it was difficult to estimate the exact amount they are getting from this source.

People are borrowing money, which they hope to pay back by various means: selling their property in Kabul; selling their land elsewhere; selling their tent in the camp; from the bride-wealth they receive when a girl in the family gets married; after making some profit from petty trading; or after sending some family members to work in Peshawar as daily labourers for better payment than in Jalalabad.

It was difficult to estimate the amount people got from these sources.

Coping through these means of income is observed to have serious consequences, in that it reduces the ability of the IDP population to challenge emergencies in the future or to be able to recover from emergencies. New Hadda camp is observed to be worse than Sarshahi.

Petty trading:

A considerable number of the families in Sarshahi camp are getting income from this source. The main activities in Sarshahi camp are selling food items (vegetables and sweets) and fire wood. Around New Hadda camp fire wood is very scarce; the main activity is only selling food items.

Employment by agencies in and outside the camp

This source of income was available for 17.5% of the families in Sarshahi and only 11.0% of the families in New Hadda. The type of work is skilled and unskilled work. Payment is made both in food for work (FFW) and cash terms. The value of FFW was changed to cash in order to estimate the average payment from this source. It was found to be about 100,000 AFs/month.

Estimation of average income per family

Most of the families had more than one source of income. The different sources of income reported by the families were noted down and average income from each source was estimated to obtain the total income/family. The income from all the interviewed households was added up and then divided to the total number of interviews in order to obtain the average income/family.

The average income/family from different sources, excluding selling assets and borrowing, in Sarshahi camp was found to be 110,000 AFs/month (18.3 USD), this varied from 20,000 AFs - 480,000 AFs/month. In New Hadda average monthly income/family was found to be 82,564 AFs/month (13.8 USD), which varied from 0.0 AFs - 180,000 AFs/month.

The cost of minimum diet for the camp population is estimated to be 173,650 AFs (37.3 USD)/month when the present ration is available (see table below). Therefore, the average income/family only covers about 63% and 47% of the cost of minimum diet in Sarshahi and New Hadda camp respectively (see below).

Selling assets and borrowing might have contributed considerably to meet the observed good food consumption and nutritional status at the time of the survey. The above estimation of average income might have been underestimated due to the reasons that: a considerable number of families in New Hadda and Sarshahi were observed to have more than one tent (more than one ration card per family); some people may have wanted to exaggerate the problems and under reported on their food/income sources so as to attract attention of aid organizations.

Cost of minimum food basket:

The table below shows the minimum basket which was calculated according to the recommended requirements for a desirable activity (2100 Kcal/day). The minimum basket was established from available food traditionally included in the Afghan diet. Costs were calculated according to the price in December 1995.

Table 4: Cost of minimum diet, in Afghanis (AFs) (1 USD= 6000 AFs)

Item	Quantity/day	Kcal/day	Protein/day	Cost
Wheat flower	500g	1650	62g	500
Potatoes	100g	80	2g	110
Beans	50g	168	11g	288
Ghee/oil	20g	180	0g	129
Tea	4g	0	0g	38
	Total	2078	75g	1065

Cheap vegetables like spinach and other dark green vegetables, and citreous fruits like lime were observed to be consumed by many. These are good sources of vitamins and can also play a role in facilitating a good absorbtion of other nutrients from the cereal based diet.

The cost of the minimum required diet/person is 31,950 AFs (5.3 USD) a month or 223,650 AFs (37.3 USD) a month for a family of 7 people. General food ration contributed about half of the staple needs, which is worth about 50,000 AFs. Therefore the actual cost of the minimum required diet for a family, receiving the present general food ration, is about 173,650 AFs.

Fuel for cooking is not included in this. Most of the families collected their own fire wood. Fire wood is observed to be more scarce in New Hadda than Sarshahi.

Although free schools (for boys and girls) are available in both New Hadda and Sarshahi camp, most of the young children don't have the time to attend, since they have to work all day long (selling their labour) to bring some additional income for their families or they have to collect fire wood as most families can not afford to buy it. This is especially very sad as most of these children were enrolled in schools before their displacement from Kabul.

All the above factors showed that the food security situation of the IDP is precarious especially in New Hadda.

4.5 Child feeding practices

Similar infant/child feeding practices were observed at all the 4 locations with some differences in the length of breast-feeding.

Starting from the very early days of life children are given black tea, and other herbs (the most popular one is called Bertang), so exclusive breast-feeding is rare. Colostrum (the first yellowish breast milk) is considered to be dirty and believed to cause sickness to children; most mothers interviewed reported that they didn't give colostrum.

4.5.1 Average length of breast-feeding:

New Hadda camp:	21 months
Sarshahi camp:	25 months
Jalalabad city:	31 months
Shenwar District:	34 months

These lengths of breast-feeding are considered to be very good in the view of the importance of breast milk for young children.

As can be seen from above the length of breast-feeding is higher among the local population (city and rural) than the displaced. Lack of time and care for children, which is expected among the displaced population, might have been one of the reasons behind the shorter length of breast-feeding observed in the camps. This can also explain the difference in the length of breast-feeding between Sarshahi and New Hadda camp in that living conditions are better in Sarshahi and hence, probably more time and care is given to children in Sarshahi than in New Hadda.

It is known that traditionally Afghan women breast-feed as long as 3 years of age; the 34 months length of breast-feeding in the rural district is considered to be

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-SHENWAR DISTRICT (24/1 - 1/2/96)

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